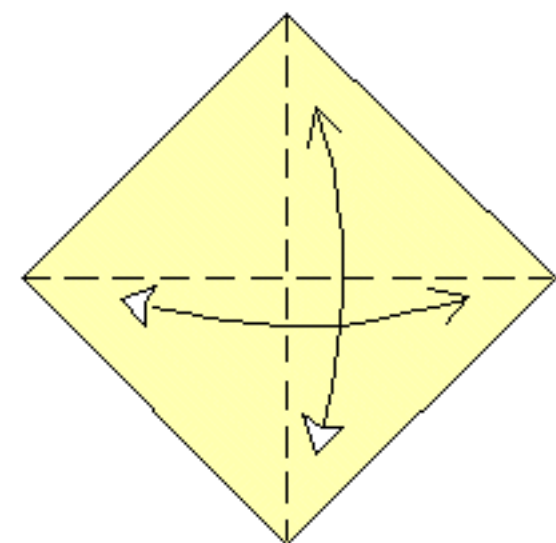


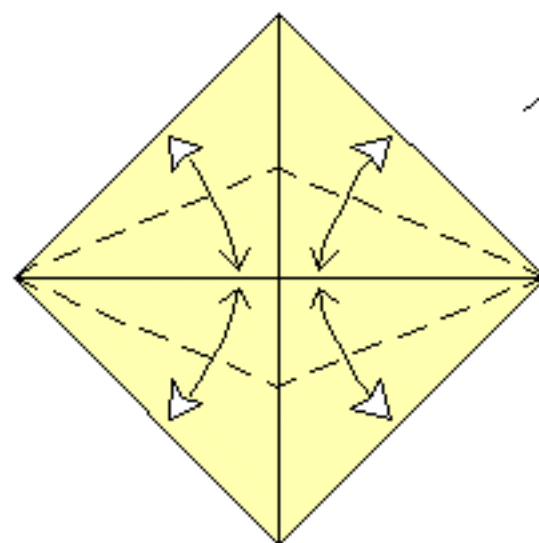
Spined Ant

©Hans Birkeland 1997

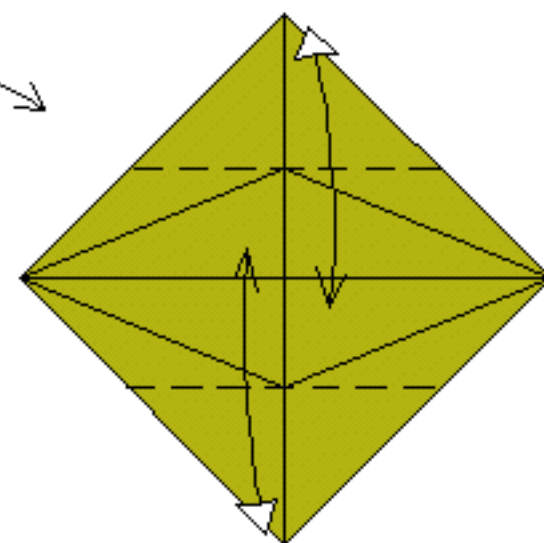
Use foil-backed paper



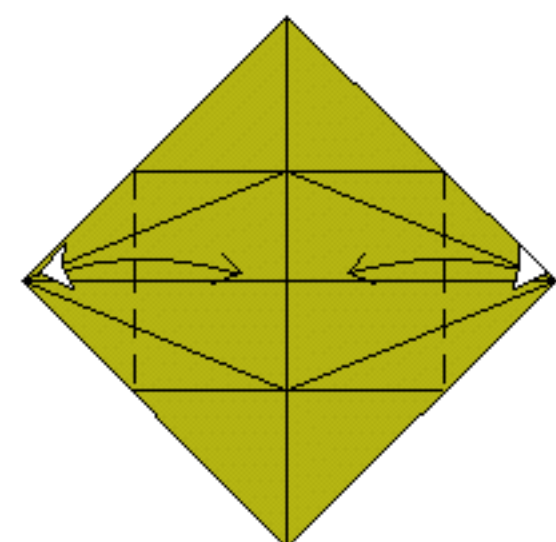
1 Begin with the white side up. Fold and unfold the diagonals.



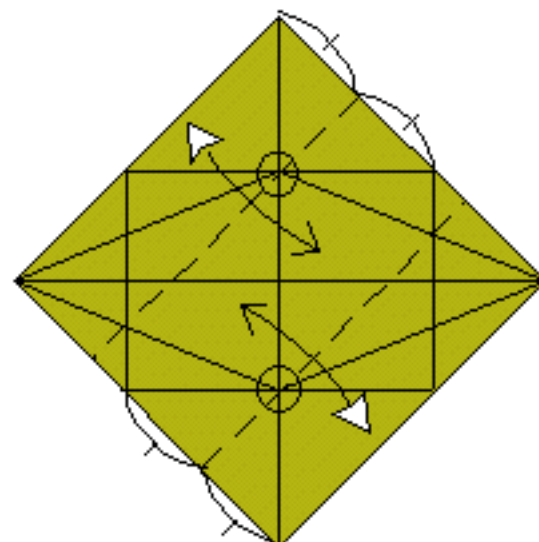
2 Fold and unfold the angle bisectors. Turn the paper over.



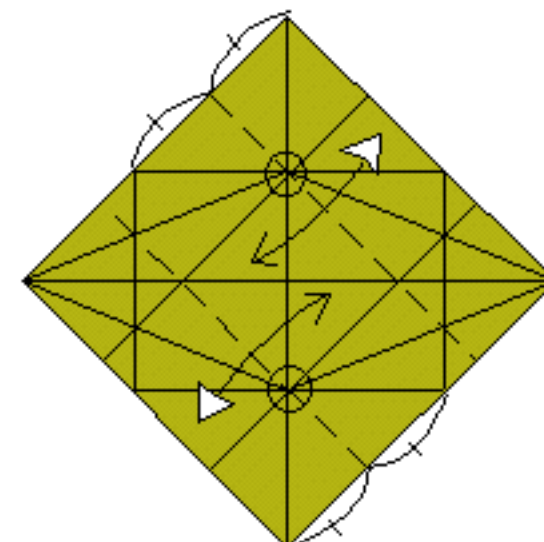
3 Fold and unfold.



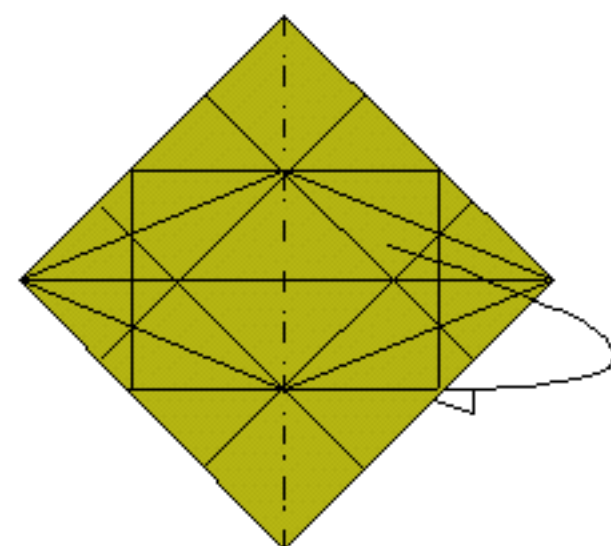
4 Fold and unfold.



5 Fold and unfold.



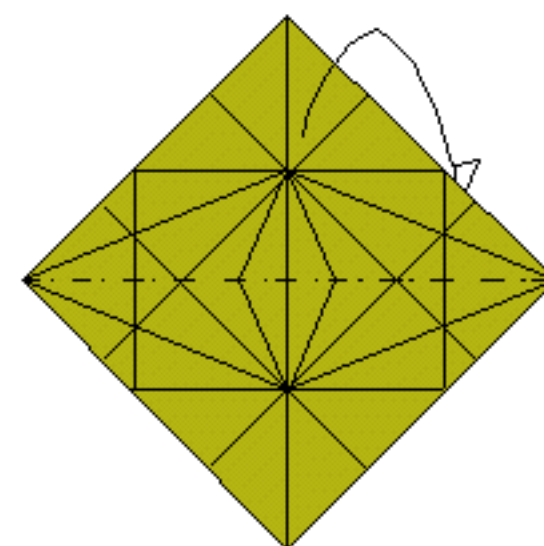
6 Fold and unfold.



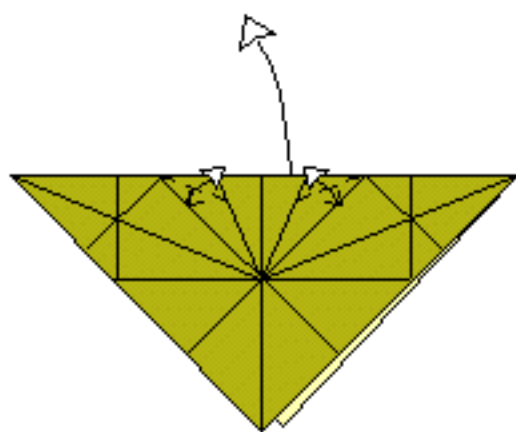
7 Mountain-fold behind.



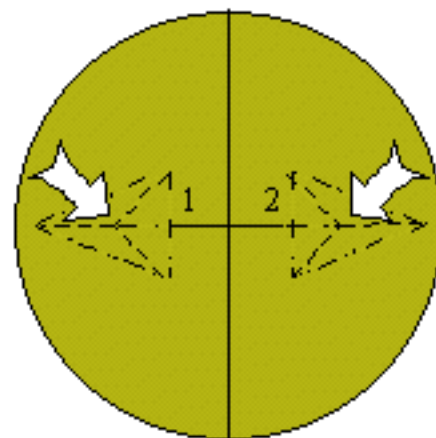
8 Fold and unfold the angle bisectors through both layers. Unfold to step 7.



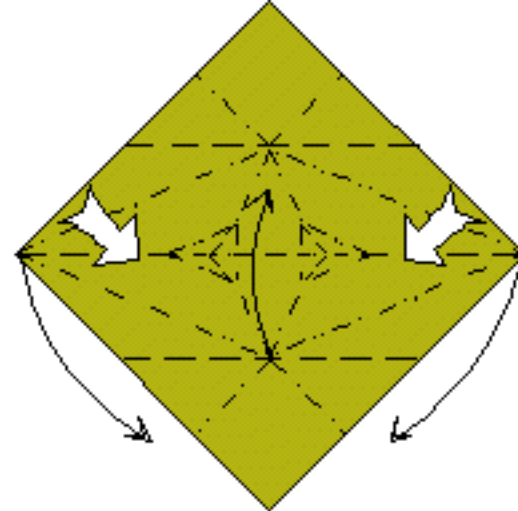
9 Mountain-fold behind.



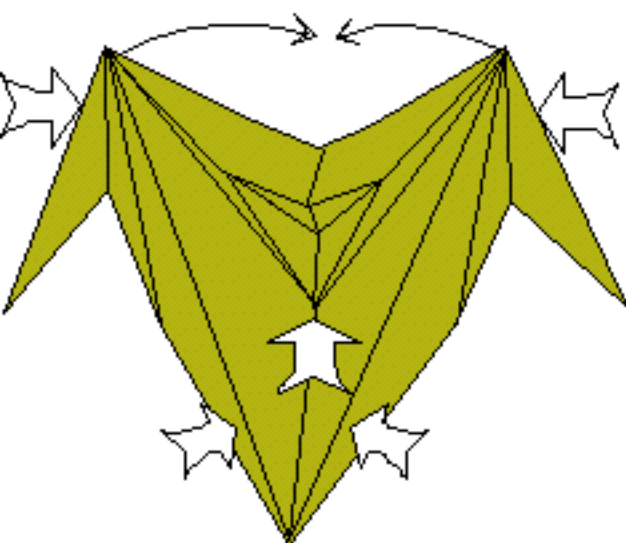
- 10** Fold and unfold the angle bisectors through both layers. Unfold.



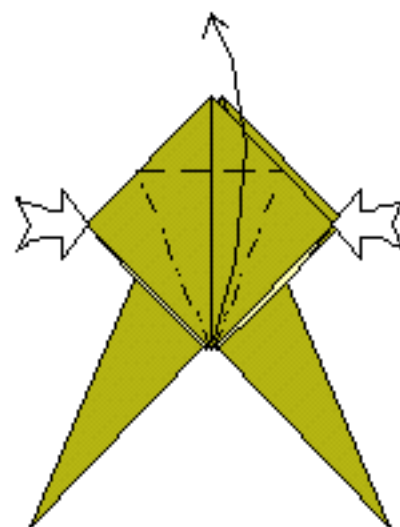
- 11** Enlarged view. Make the two vertical mountain-folds and then start pushing in the area within the triangles (see next step).



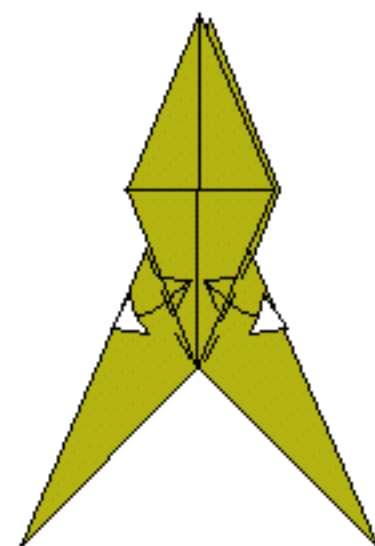
- 12** Collapse on existing creases. Next step shows this step seen from the side.



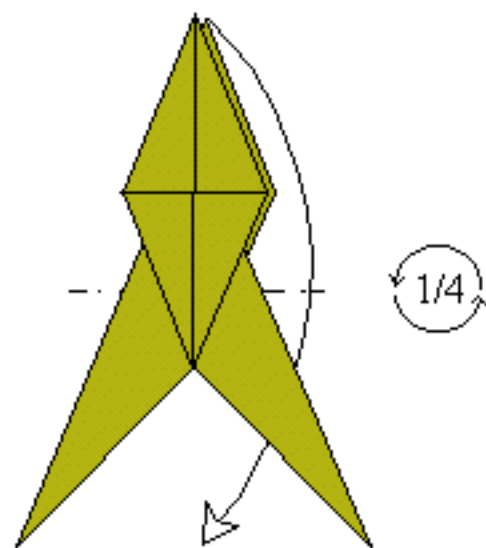
- 13** Step 12 seen from the side, partially collapsed.



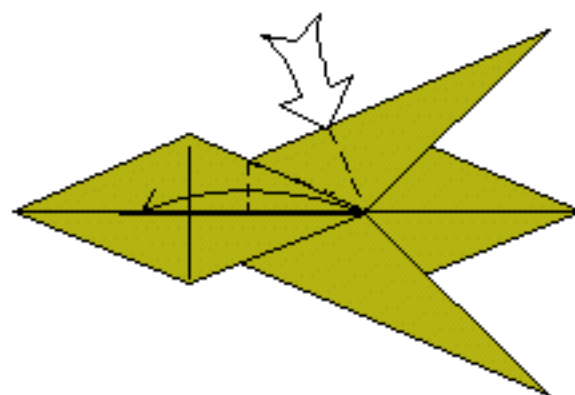
- 14** Petal-fold. Repeat behind.



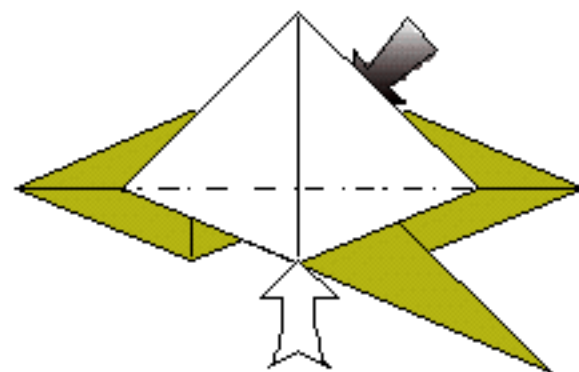
- 15** Fold and unfold through all layers.



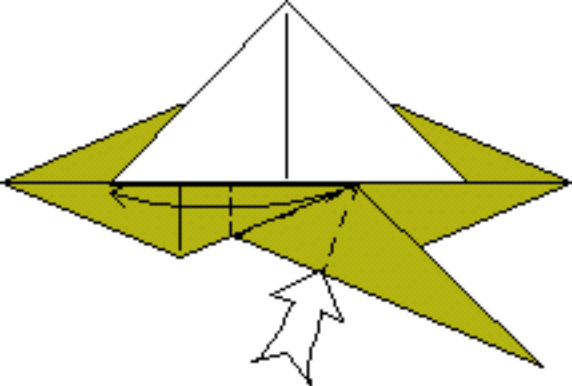
- 16** Fold the flap at the back down as far as it will go. Rotate the model.



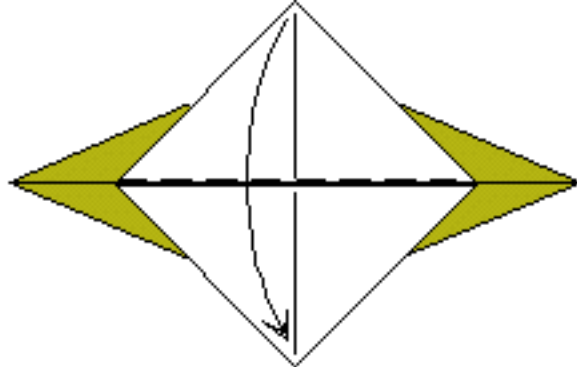
- 17** Swivel-fold. Repeat on the right, thus being able to squash flat (see next step).



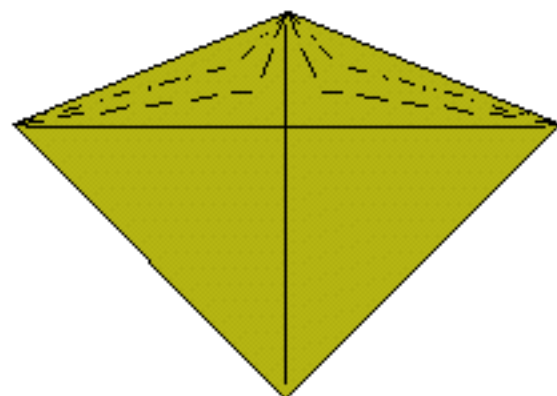
- 18** Like this. Closed-sink the lower triangle upward.



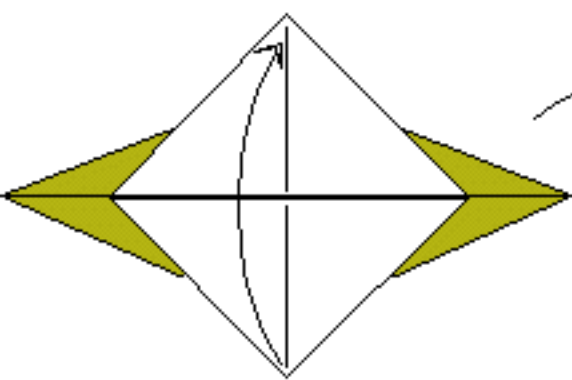
19 Repeat steps 17-18 on the lower flap.



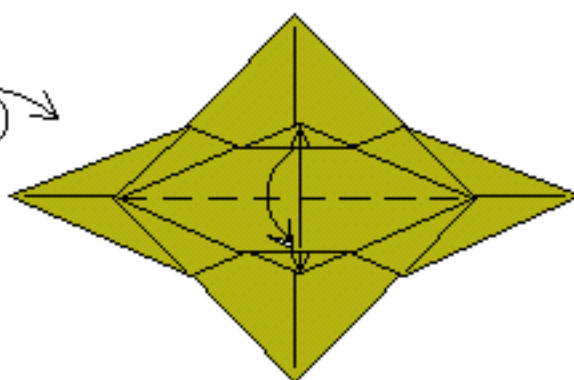
20 Fold the upper flap down.



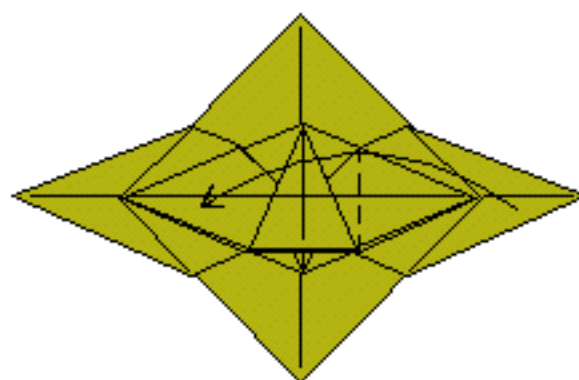
21 Enlarged view of the center flap. Pre-crease the upper part, dividing in thirds. Then unfold to step 20.



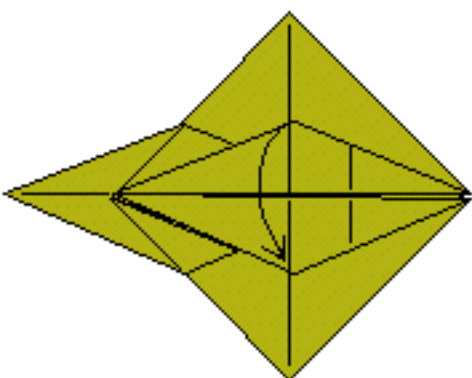
22 Repeat steps 20-21 on the lower flap. Turn the model over.



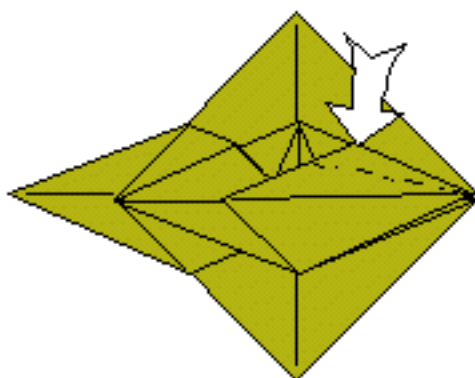
23 Valley-fold one edge down.



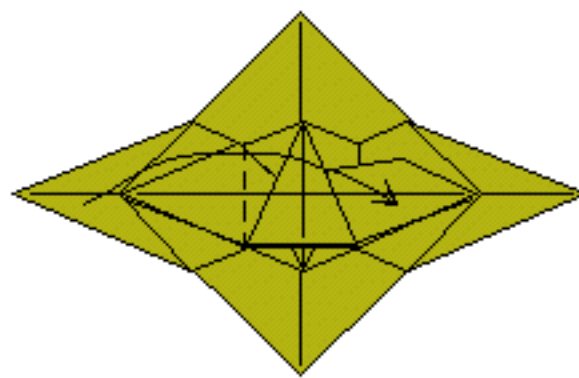
24 Fold the right flap to the left as far as it will go.



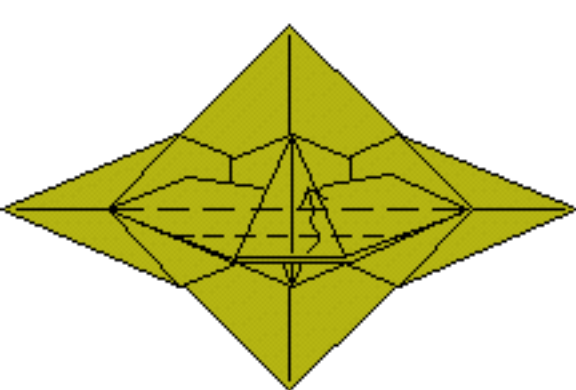
25 Fold down one layer.



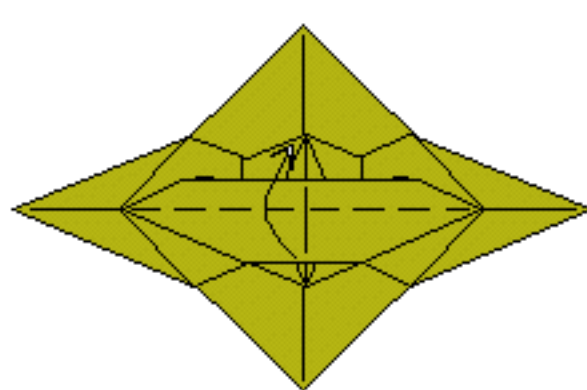
26 Open-sink the edge on the angle bisector. Then refold to step 24.



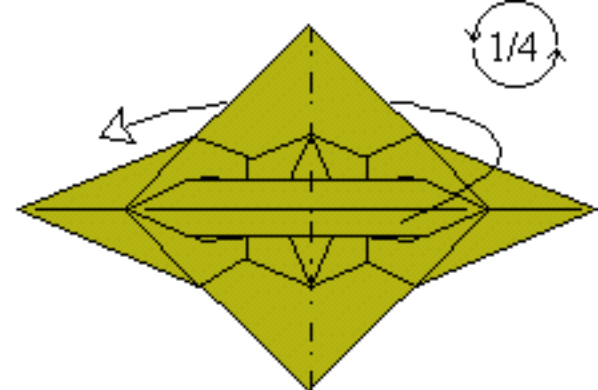
27 Repeat steps 24-26 on the top left.



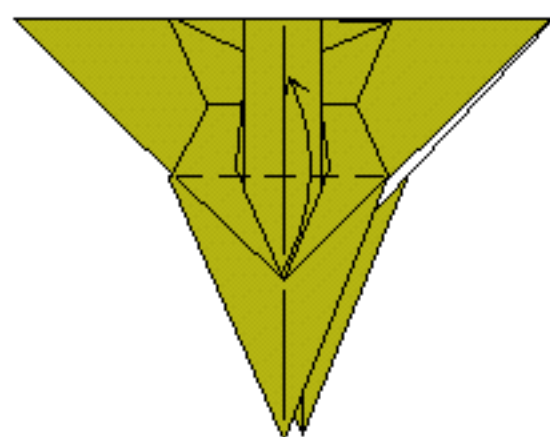
28 Fold over and over.



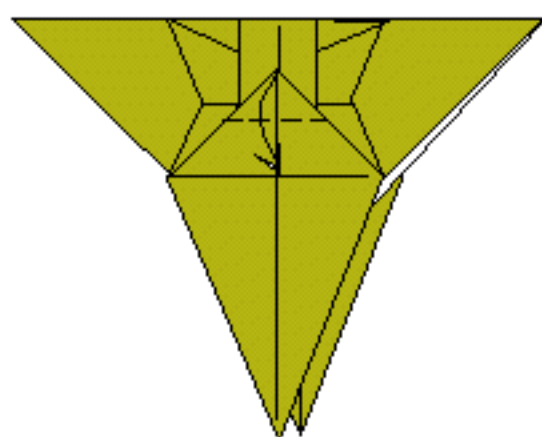
29 Repeat steps 23-28 below.



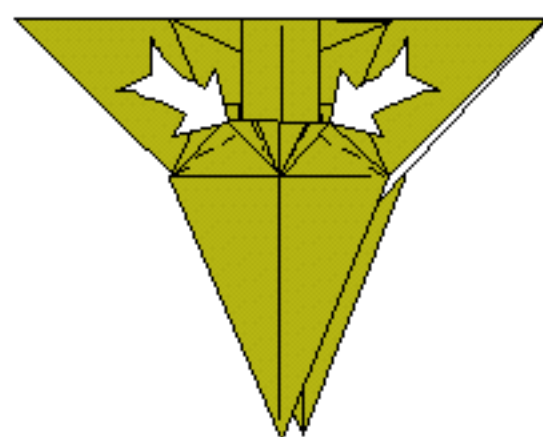
30 Mountain-fold in half. Rotate.



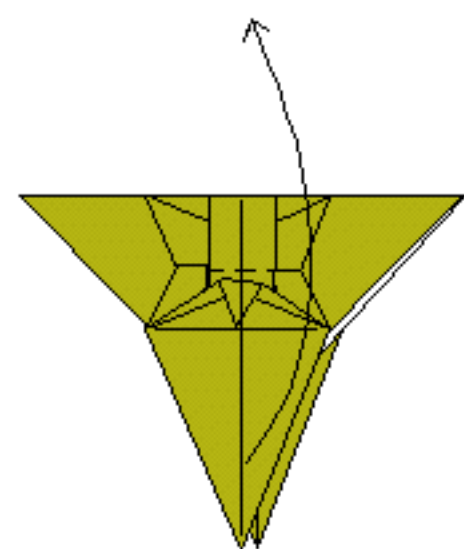
31 Valley-fold.



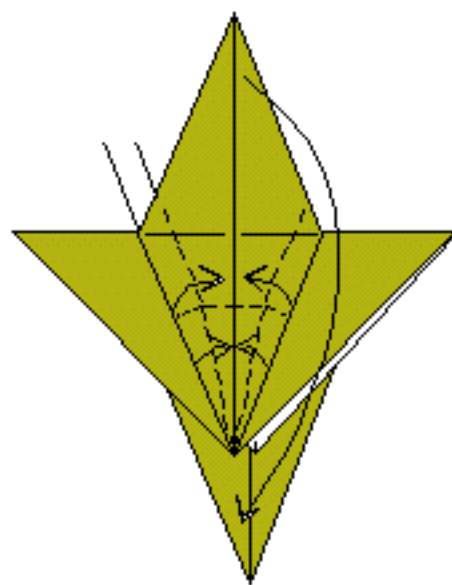
32 Valley-fold.



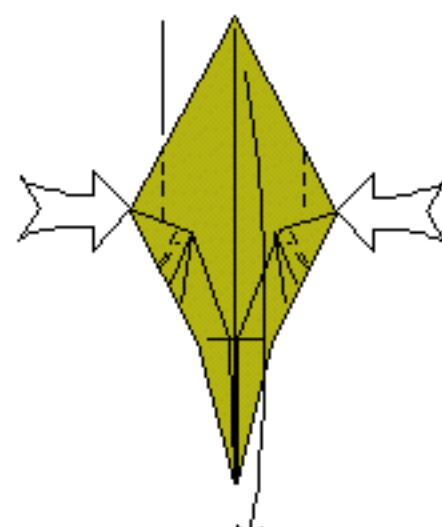
33 Swivel-fold.



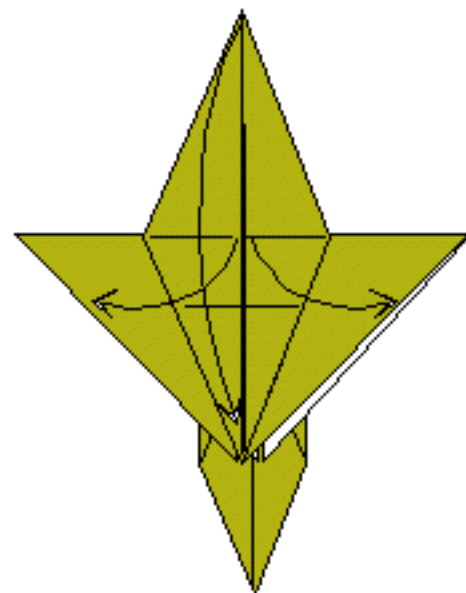
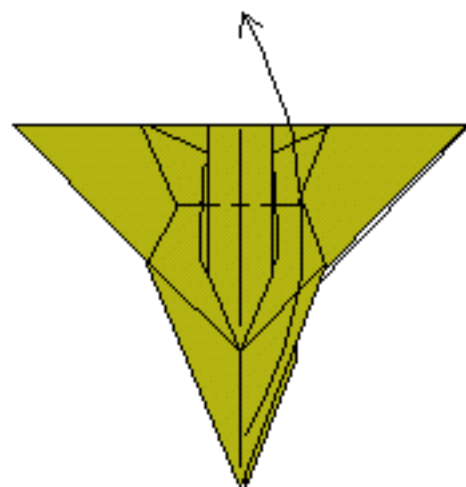
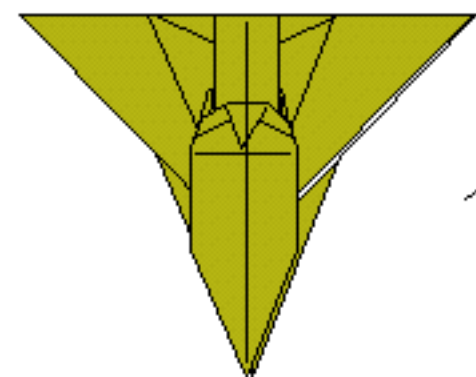
34 Valley-fold.



35 Fold in the edges as the large flap is folded down. See next step.



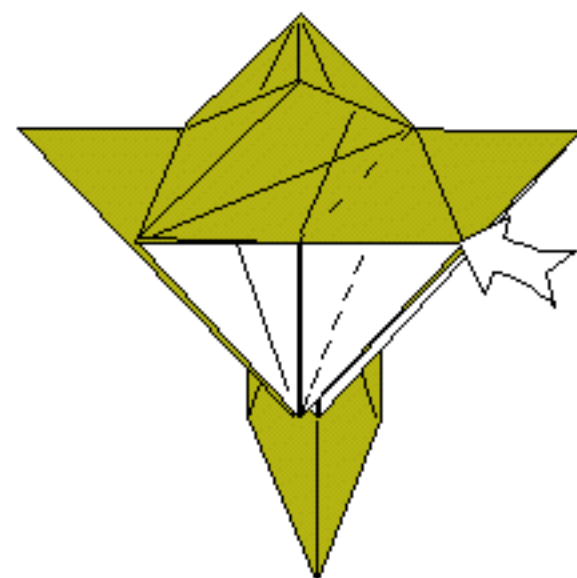
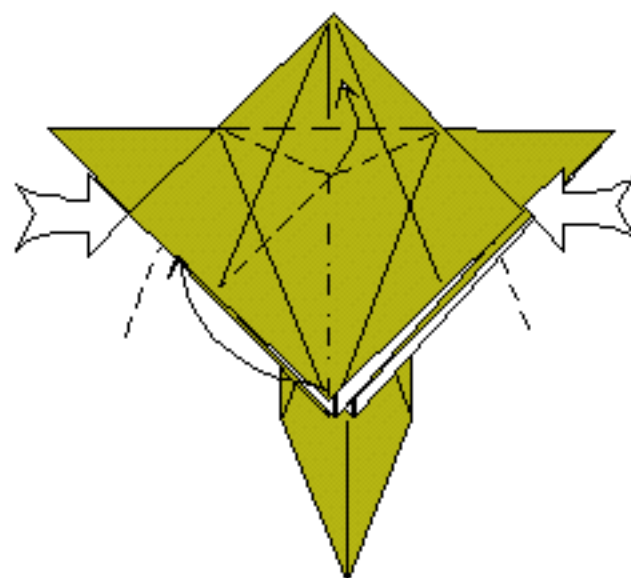
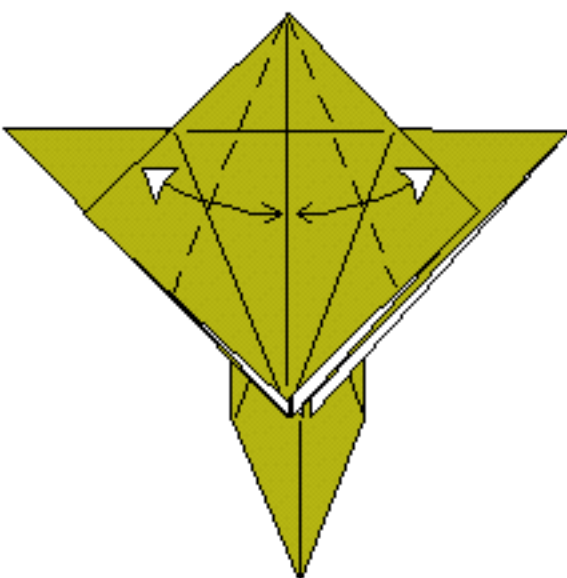
36 In mid-air. Swivel-fold. Continue folding the flap down.



37 Turn the model over.

38 Valley-fold.

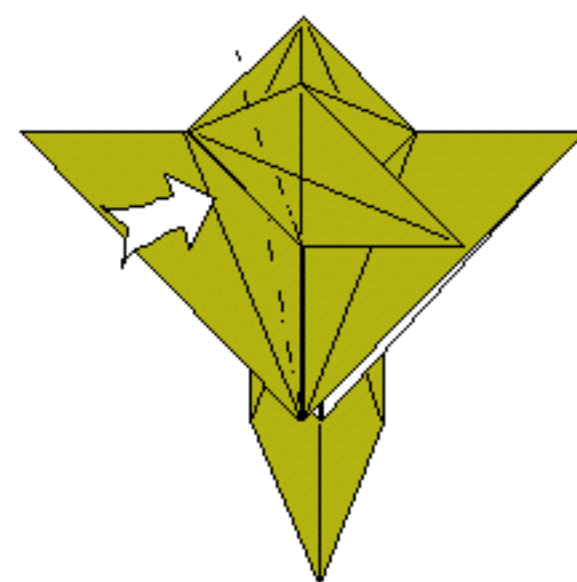
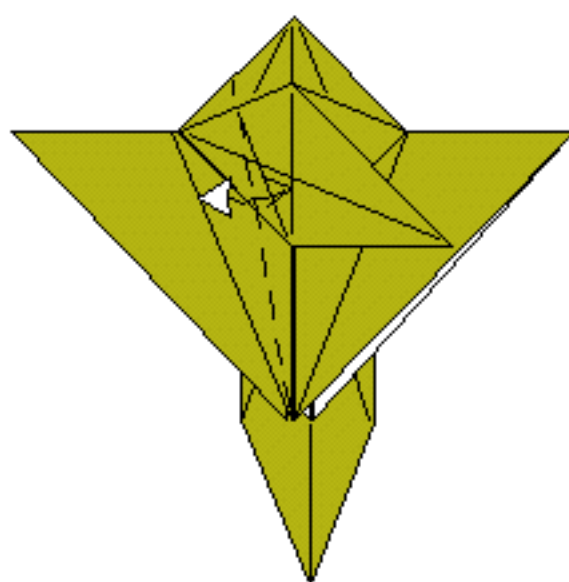
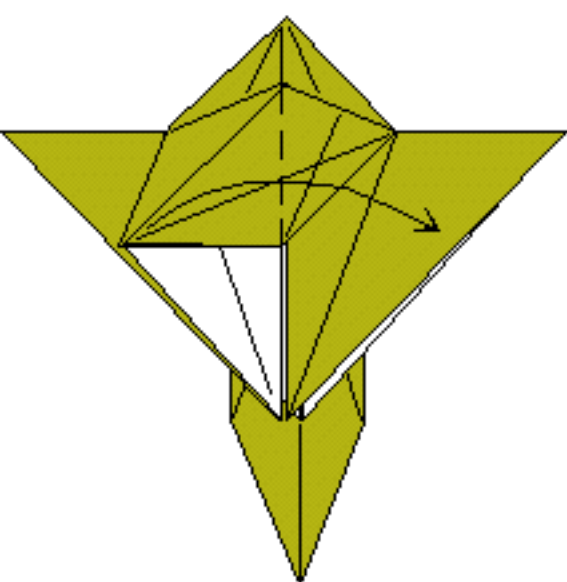
39 Unfold the petal fold.



40 Fold and unfold.

41 Squeeze the sides together and swing the bottom flap over to the left. See next step.

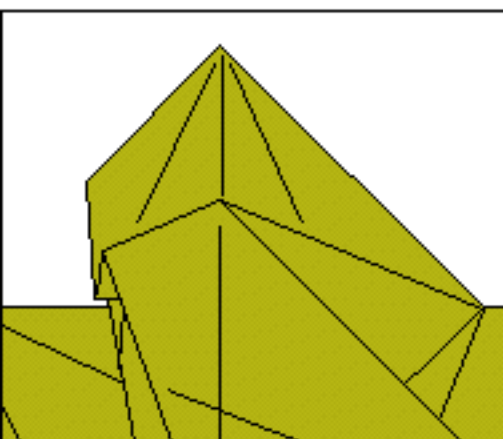
42 Reverse-fold.



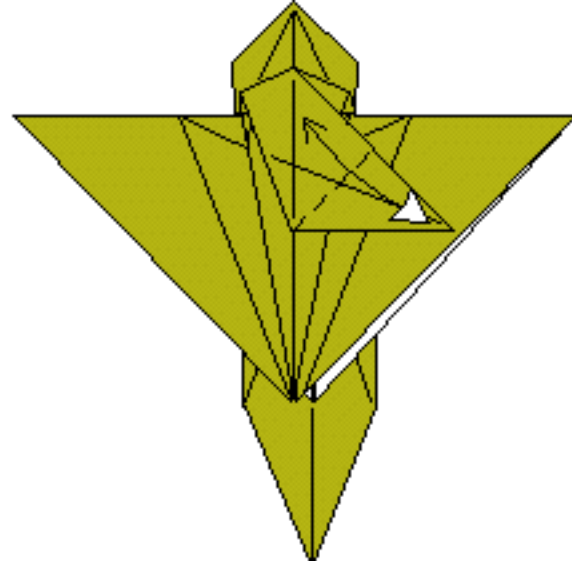
43 Valley-fold the center flap to the right, and repeat step 42 on the left side.

44 Fold and unfold.

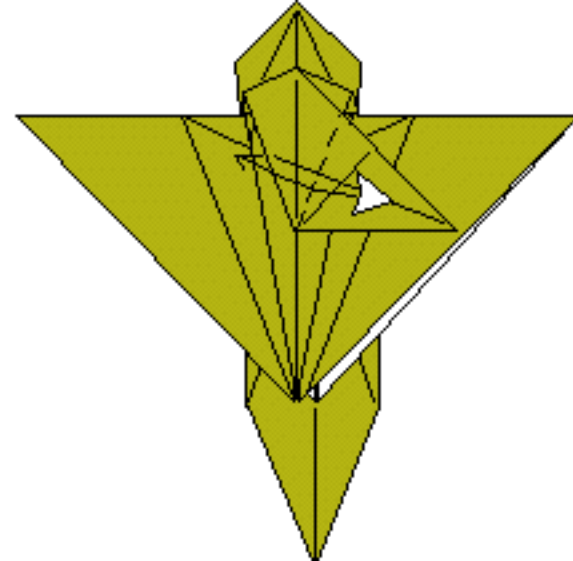
45 Open sink.



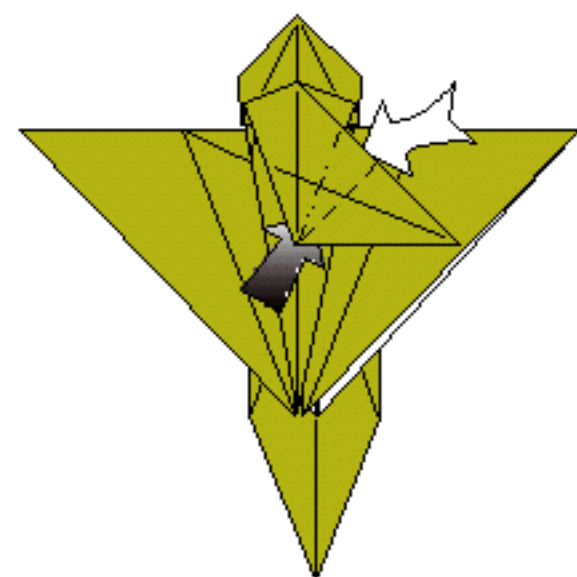
46 Detail of sink. Repeat steps 44-45 on the left side.



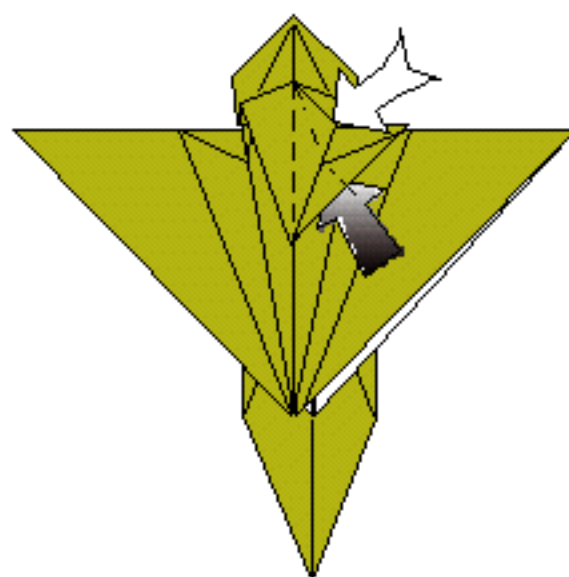
47 Fold and unfold the angel bisector.



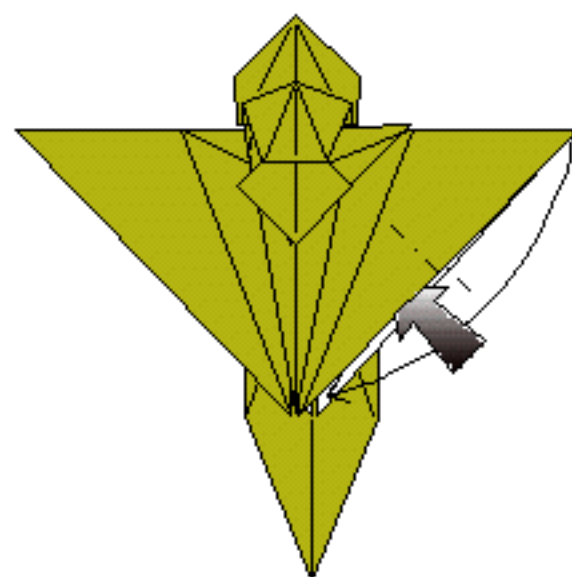
48 Fold and unfold the angle bisector.



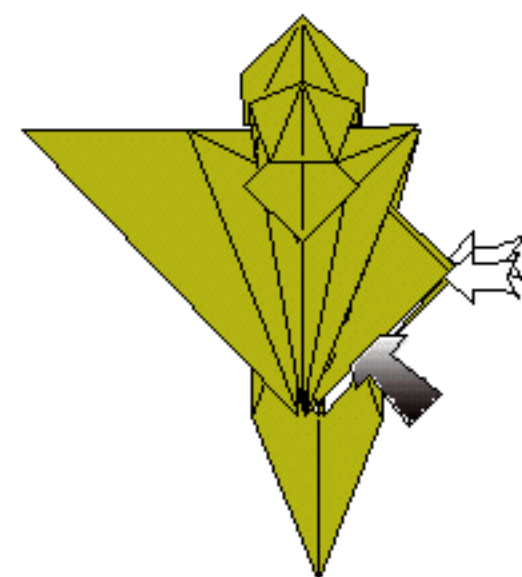
49 Reverse-fold in and out.



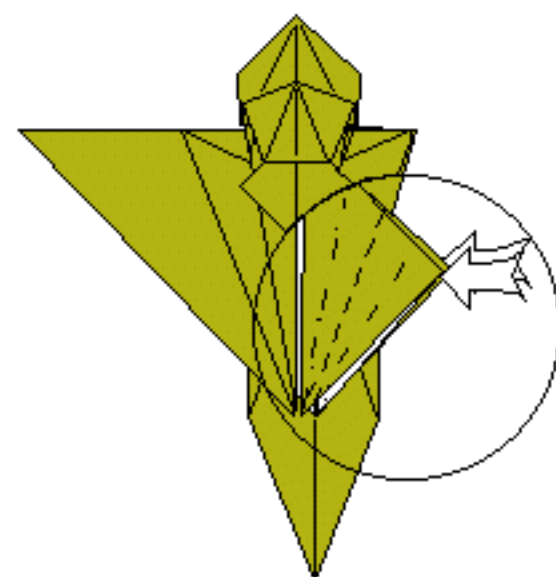
50 Spread-squash.



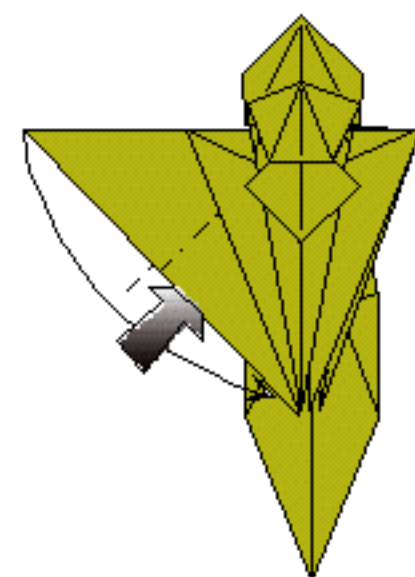
51 Reverse-fold.



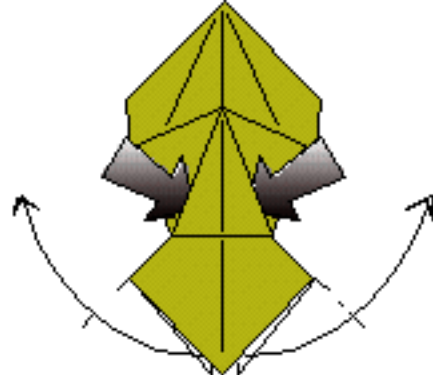
52 Reverse-fold two edges. Then unfold.



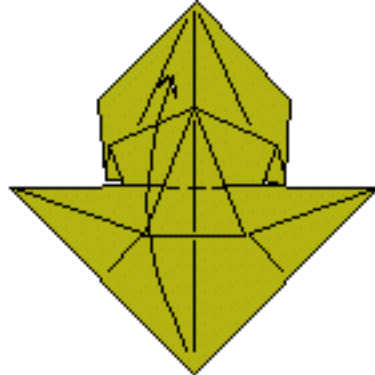
53 Cut-away view. Reverse-fold each edge three times. The valley fold is on the crease made in step 52.



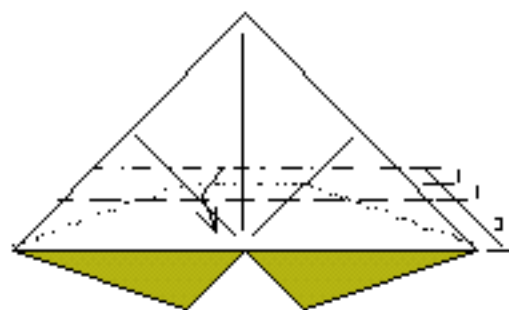
54 Repeat steps 51-53 on the left flap. This is easier if the right flap is unfolded during the process.



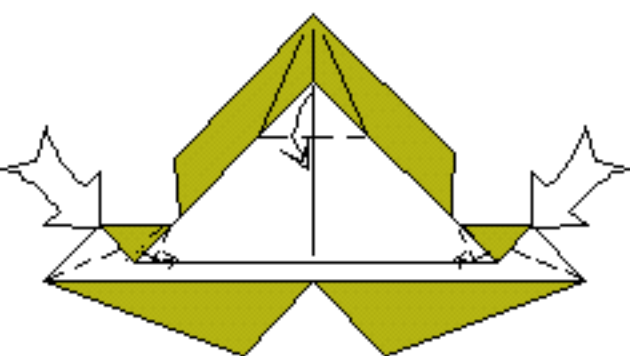
- 55** Enlarged view of the head. Reverse-fold the antennae to each side as far as they will go.



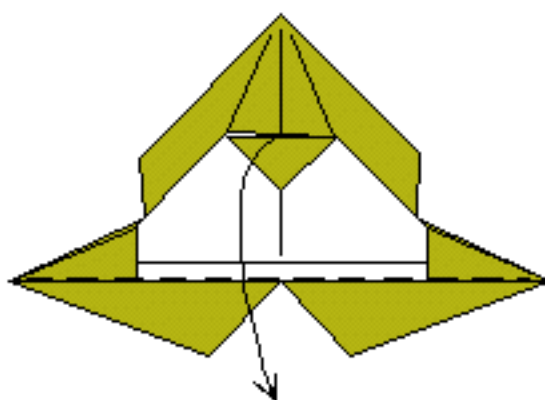
- 56** Lift the flap upward without pressing flat.



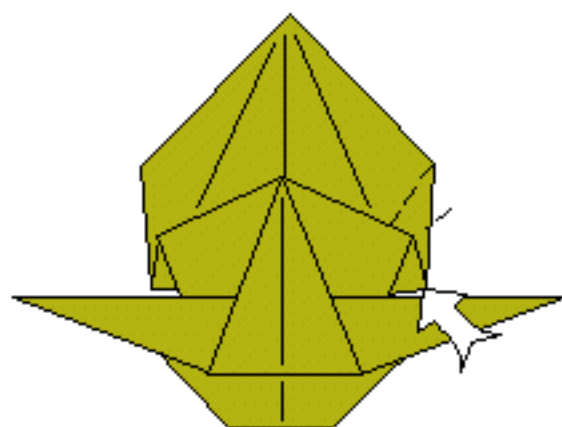
- 57** Pleat-fold. The divisions, using the edge behind, are approximate.



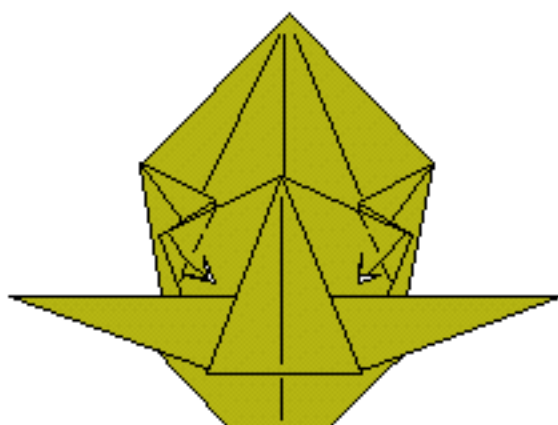
- 58** Swivel-fold the sides. Valley-fold the top corner.



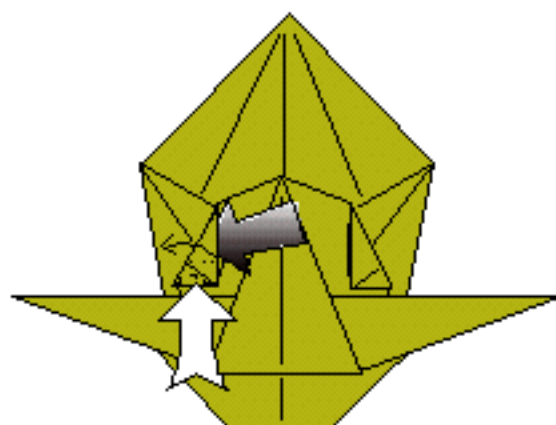
- 59** Fold down.



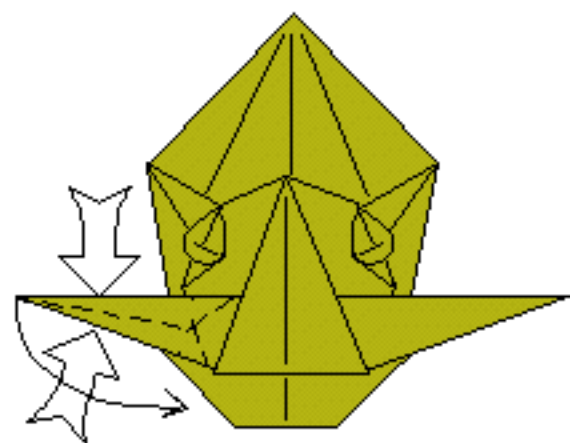
- 60** Reverse-fold. Repeat on the left side.



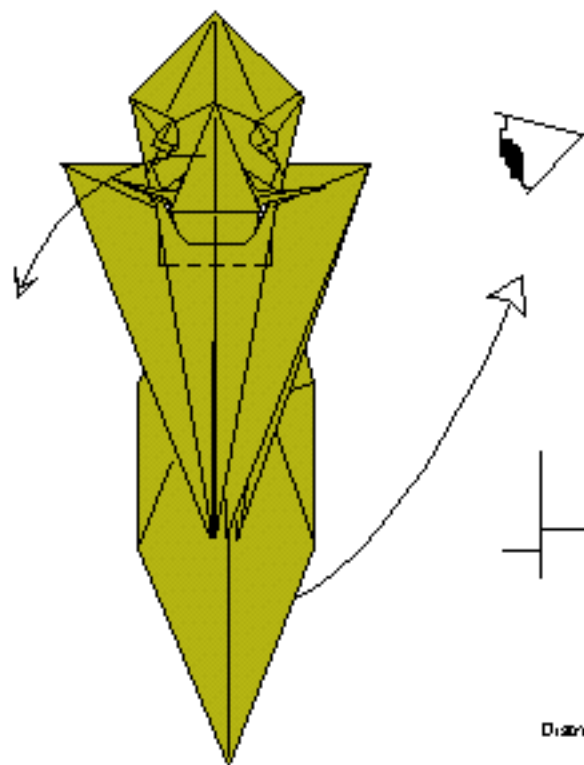
- 61** Valley-fold.



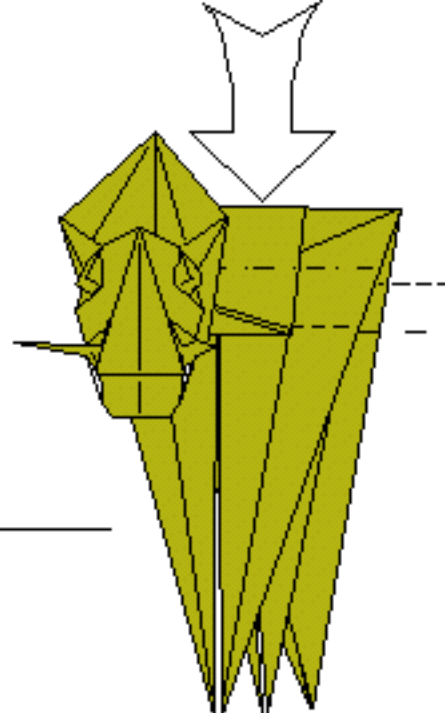
- 62** Open up the eyes and squash flat.



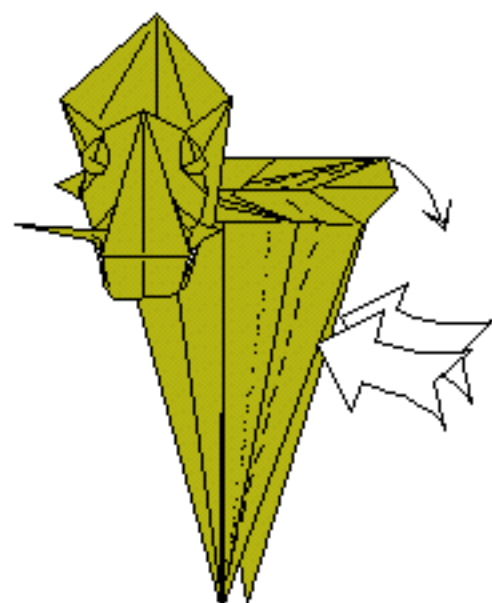
- 63** Rabbit-ear the antennae so that they point straight out toward you.



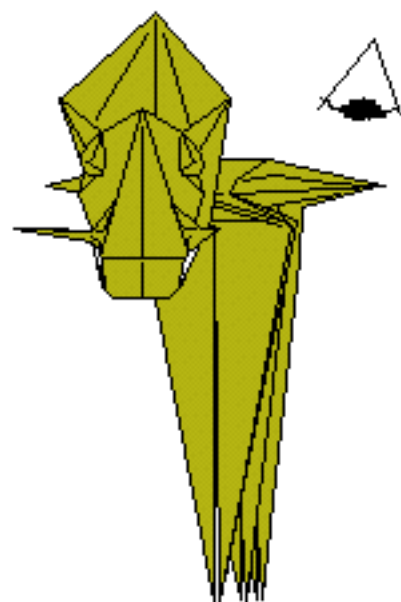
- 64** Lift the flap at the back and fold the head to the front. Next view from the right side.



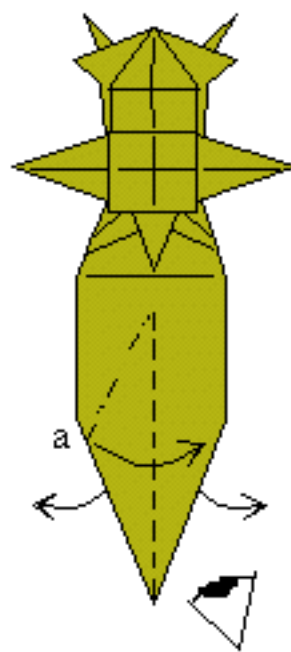
- 65** The back-body is not shown. Squash the thick edge flat.



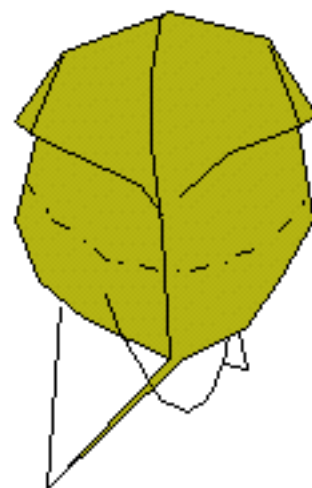
- 66** Collapsing on the creases made in step 21, put the two edges inside the nearest pockets. The resulting point will point slightly downward. Repeat behind.



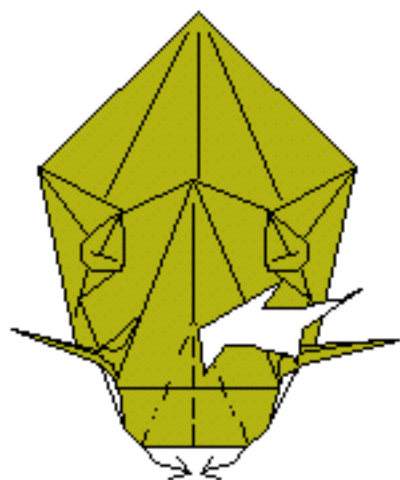
- 67** Like this. Next view from top of back-body.



- 68** Open up the edges below and fold corner **a** over to the right. The body becomes 3-dimensional.



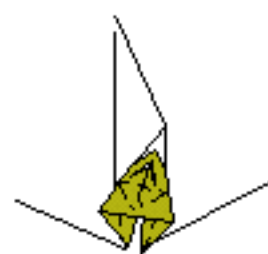
- 69** View from behind. Fold the edge inside.



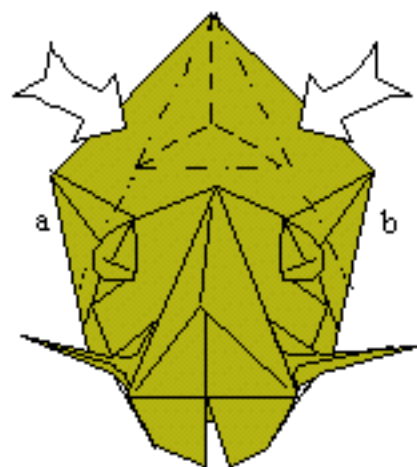
- 70** Detail of head. Push in where indicated. Press the jaws together and fold the resulting edge to the left at the back-side. Next view from behind the jaws.



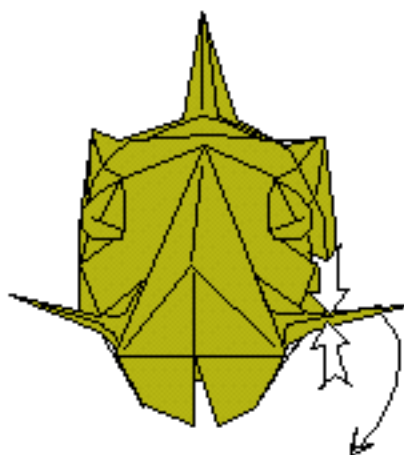
- 71** Squash-fold.



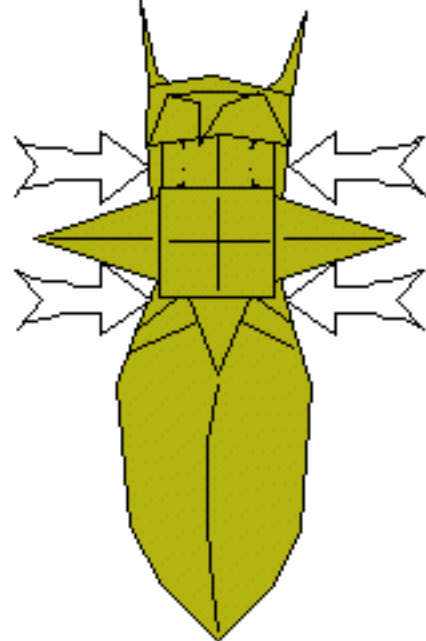
- 72** Petal-fold.



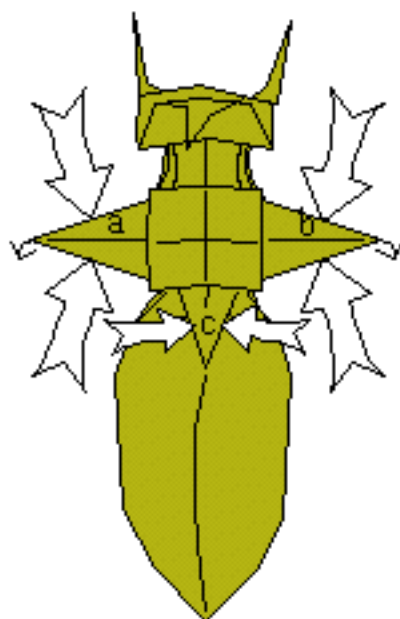
- 73** Collapse to make a point partly on existing creases. Edge **a** and **b** will point straight backward.



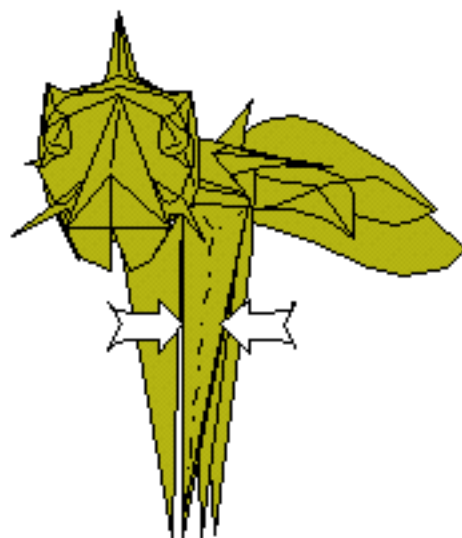
- 74** The head is now 3-D. Pinch and form the antennae.



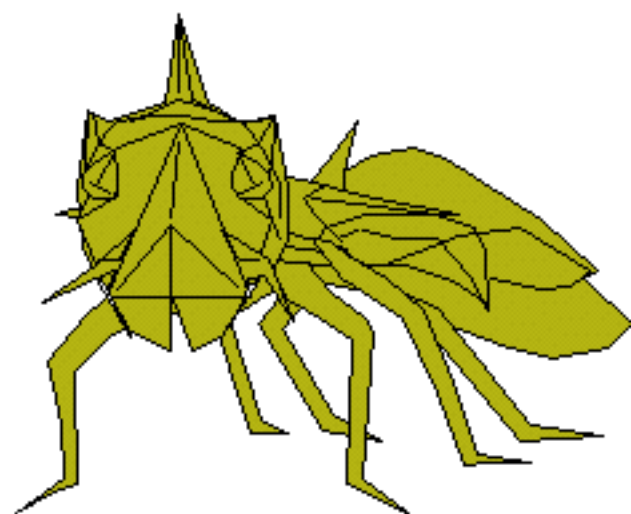
- 75** Pinch between the head and mid-body, and between the mid-body and back-body.



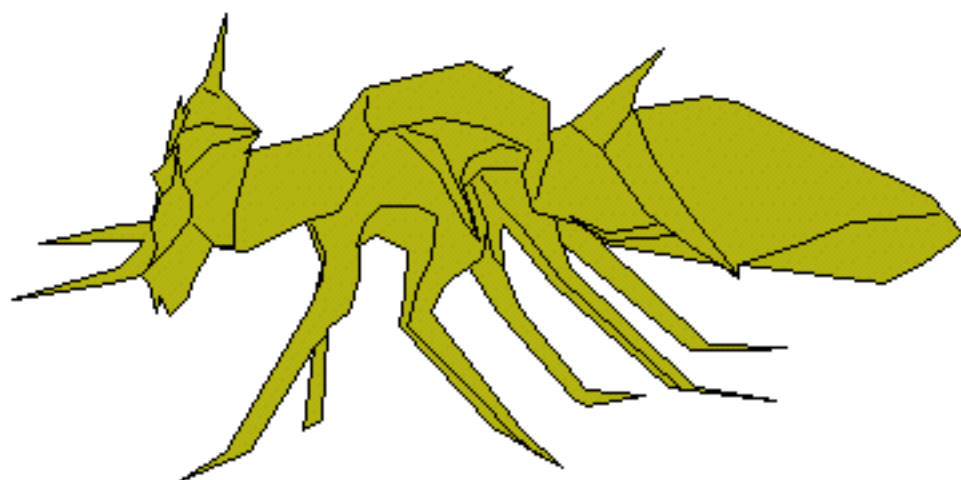
- 76** Pinch points a, b and c. Point c should be slightly raised.



- 77** Pinch the two front pairs of legs with mountain folds, and the third pair with valley folds. Then curve and form the legs to make feet etc.



- 78** The finished Spined Ant.



Side view.